AR80





#### BOARD OF DIRECTORS

ALAN S. ANDERSON
JOHN W. BUCKLEY
BENJAMIN W. HEATH
WILLIAM SHIELDS, JR.
M. A. REASONER

### **OFFICERS**

JOHN W. BUCKLEY

President

M. A. REASONER
Vice President & General Manager

ROLAND J. RICHARDSON Vice President & Controller

ARTHUR B. O'DONNELL Secretary & Treasurer

K. Ross Jordan

Assistant Secretary & Assistant Treasurer

#### **AUDITORS**

Arthur Young, Clarkson, Gordon & Co.

Securities Transferred in the United States of America by

The First Jersey National Bank, 2 Montgomery Street, Jersey City, N. J. 07303
and
United California Bank, 108 West 6th Street, Los Angeles, Calif. 90054

Inquiries or requests for additional information concerning Canada Southern Petroleum Ltd.
should be addressed to the Company in care of
The First Jersey National Bank, P.O. Box 960, Jersey City, N. J. 07303,
or to 505 Eighth Avenue South West, Calgary, Alberta, Canada.

#### PRESIDENT'S LETTER

#### To the Shareholders:

A series of developments over the past year served to keep public attention focused on the world's newest and potentially largest and most promising oil search area — the vast sweep of land and ocean within and adjoining the Arctic Archipelago: the Alaskan north slope, the north Canadian mainland, the Arctic Islands and the millions of offshore acres bordering all these land masses.

The historic voyage of the Manhattan through the polar ice of the Northwest Passage demonstrating the possibility of oil shipments via Arctic seas, the great Alaskan oil rush culminating in last September's \$900 million Anchorage auction of state-owned lands, the unique Canadian government-private industry consortium now engaged in a \$20-\$30 million exploratory search across the Arctic Archipelago, the growing recognition that Canada's largest natural gas reserve may underlie the Beaver River-Pointed Mountain area of British Columbia and the Yukon and Northwest Territories where no less than three companies are vying for permission to construct pipelines to markets — these and related events of the past year combined to draw public attention to the vast economic potential of the Far North.

Canada Southern's strong representation in the Arctic Archipelago is attested by the extensive permit interests it holds in this latest exploratory frontier, consisting of 8,240,000 gross acres, of which 4,516,000 gross acres (2,015,000 net acres) are farmed out to Panarctic Oils Ltd., the consortium of private oil and mining companies and the Canadian government now engaged in the cooperative oil search venture mentioned above. The gross acres farmed out by Canada Southern to Panarctic represent over 10% of the total acreage presently included in the consortium's program.

The remaining 3,724,000 acres held under permit by the Company in the Arctic Islands are 100%-owned properties, located in the highly prospective Sverdrup basin, of which nearly 3,600,000 acres consist of offshore permits. The Canadian Geological

Survey has estimated that up to 40,000 feet of sediments may have been deposited along the axis of the basin, which is approximately 600 miles long and up to 250 miles wide. Of the 4,516,000 gross acres farmed out to Panarctic, approximately 2,200,000 gross acres represent onshore properties in the Sverdrup basin.

With a view to scientific evaluation of its 100%-owned offshore acreage in the Sverdrup basin, Canada Southern plans to commit \$1,100,000 to a marine geophysical exploration program. The program, which is scheduled to begin in July 1971, would provide the Company with seismic data covering much of its wholly-owned offshore acreage in the basin.

Under the Panarctic exploratory program, inaugurated in early 1969, two medium depth wells drilled by the consortium on Melville Island were dry and abandoned. A third well on this island, Panarctic Drake Point L-67, a projected 10,000-foot test, reportedly is blowing wild. A high pressure gas sand encountered at 3,600 feet was controlled until the well reached 8,454 feet, at which point a blow-out of such force occurred that it became necessary to move the rig. Panarctic subsequently commenced drilling a relief well, Drake Point K-67A, 1,200 feet to the east, with the intention of determining which zones caused the blow-out. This new hole, which has reached a depth of 8,400 feet, was reported to have tested gas at the rates of 10 million cubic feet per day at about 3,700 feet and 13 million cubic feet per day at 4,700 feet. Panarctic is moving in a second rig for the drilling of its scheduled fourth well on Melville Island, Panarctic Towson Point G-63. A third rig is reported being moved in to a location, Panarctic Hoodoo Dome F-27, on the southeast part of Ellef Ringnes Island.

While the voyage of the Manhattan through the Northwest Passage captured public attention in recent months, a related development likewise gave promise of opening Arctic Ocean channels to year-round sea transportation. This was the use of the new Axelbow plow on one of the barges used to ship drilling supplies to Melville Island. The Axelbow method of plowing the ice rather than breaking it up from above has shown considerable promise and further trials are in prospect.

In the Beaver River area of British Columbia, south of the Company's currently shut-in North Beaver River gas discovery, Pan American Petroleum Corporation is reported to have completed a fifth natural gas well. In the neighboring Pointed Mountain field of the Northwest Territories, nine miles north of a Canada Southern 12,720-acre lease (CSP, 90% working interest), Pan American has completed three gas wells. As a measure of the significance of the reserves established by the nine deep wells in this area, believed to be one of the largest natural gas reserve areas in Canada, several recent proposals have been made to construct major pipelines connecting the Beaver River-Pointed Mountain area with United States markets.

In northern Saskatchewan and northeastern Alberta, Canada Southern has engaged in extensive geological and geophysical studies on its mineral prospecting permits in the Athabasca basin. The discovery last year by a Gulf Oil Corporation subsidiary of uranium deposits near Wollaston Lake in northern Saskatchewan was followed by one of the largest mineral acreage plays in Canadian history.

The Company further broadened the geographic diversification of its oil-search operations this year through the acquisition of a 25% interest in 5,183,360 acres of petroleum permits offshore New Zealand's North and South Islands.

The petroleum search offshore New Zealand has attracted mounting interest as a result of the discovery of oil last March by the Shell-British Petroleum-Todd Services consortium at its Maui No. 1 well, some 33 miles off the west coast of North Island. Late in November the consortium confirmed the discovery with its Maui No. 2 well, nine miles nearer the coast. This is the first of several widely-spaced confirmatory tests which the consortium reportedly plans to drill in the same general area.

The combination of rising demands for petroleum and the mounting turbulence in the Middle East, and elsewhere abroad, points up the increasingly critical need for reliability of access to reserves of this most important resource. Exploration for additional reserves of oil and gas, which are vital to the defense of the Free World, is proceeding at an ever-increasing rate.

Your Company, with a most promising acreage spread in highly prospective, politically stable areas, with a competent technical staff and a strong working capital position in excess of \$5,800,000, looks forward with confidence to the years ahead.

The following pages contain a review of exploratory and development operations affecting the Company's interests. Included also are audited financial statements for the fiscal year ended June 30, 1969.

On behalf of the Board of Directors,

John W. Buchly President

December 23, 1969

# **OPERATIONS REVIEW**

# PETROLEUM EXPLORATION AND DEVELOPMENT

# Canada

Arctic Islands. The announcement in early 1968 by Atlantic Richfield and Humble of the discovery at Prudhoe Bay on Alaska's north slope of what now appears to be the biggest oil strike in North American history has focused increased attention on the sedimentary basins of the entire Arctic Archipelago.

One of the major reservoir beds in the Prudhoe Bay field, a sandstone of Triassic Age, is of particular significance since the Sverdrup basin in the Arctic Islands, where Canada Southern holds extensive property interests, contains a very large volume of Triassic sediments including, in some places, sandstones several thousand feet thick and with apparent good porosity.

The Sverdrup basin contains various sedimentary formations including Pennsylvanian, Permian, Triassic, Jurassic, Cretaceous, and Tertiary. The Geological Survey of Canada estimates that up to 40,000 feet of sediments may have been deposited along the axis of the basin, the approximate outline of which is shown on the accompanying map. The main part of the Sverdrup basin extends over 600 miles in length and ranges up to 250 miles in width. The central areas of the basin contain a number of piercement structures similar to those found in the Gulf Coast

area of the United States. In addition, there are numerous anticlinal-type structures ranging from small to very large in size. These large surface features combined with thick reservoir and source beds exposed on the rims of the basin provide an ideal situation for the accumulation of hydrocarbons. Some of these reservoir beds are sands which are saturated with heavy oil at the surface exposures.

Because of the attractiveness of these onshore geological features, Canada Southern last year acquired 3,622,809 acres of offshore permits in the Sverdrup basin. These acquisitions reflected the Company's conclusion that offshore acreage in the area may well share the same potential as onshore properties, despite the formidable difficulties which presently exist in respect of offshore drilling in Arctic waters. Rapid advances in offshore seismic and drilling techniques are being made, and management is of the opinion that if large discoveries result from onshore drilling in the Arctic Islands, an aggressive offshore exploratory search will not be long delayed.

In addition to its offshore acreage in the Sverdrup basin, the Company holds interests in approximately 2,200,000 gross acres onshore, nearly all of which is presently farmed out to Panarctic Oils Ltd. In the aggregate, therefore, approximately 5,800,000 gross acres are held under lease by Canada Southern in the Sverdrup basin.

With respect to its offshore acreage, the Company plans to spend \$1,100,000 on a geophysical exploration program on its holdings in the interisland offshore regions of the Arctic Islands. Under consideration is a plan by Marine Resource Consultants of Santa Monica, California, to use a submarine acquired by that firm from the Swedish Navy for under-water seismic work. The program, scheduled to commence in July 1971, would provide Canada Southern with a seismic reconnaissance survey covering much of the Company's 100%-owned offshore acreage within the Sverdrup basin.

The areas outside the Sverdrup basin contain older sediments ranging in age from Cambrian to Devonian, and these also have potential for oil and gas accumulation. It is in these areas that the three wells drilled in the Arctic Islands prior to 1969 were located. Although these holes were dry and abandoned, they found hydrocarbon traces and provided information of value for future testing of these older sediments lying outside the Sverdrup basin. Canada Southern holds interests in approximately 2,400,000 gross acres in these areas, all of which have been farmed out to Panarctic.

The relatively slight precipitation which occurs in the Arctic Islands, combined with the absence of vegetation and glaciation, facilitate the mapping of structures by surface investigation and photogeology. Most of the onshore properties retained by Canada Southern were selected after such work had been accomplished on its original holdings of approximately 8,000,000 acres. On Ellesmere Island all of the Company's present holdings of 709,000 acres were selected on surface geological structures. It is possible that seismic reconnaissance will be needed to confirm some of the structures in depth and may well reveal others that are not apparent on the surface. Throughout the remainder of the Sverdrup basin indications are strong that an even larger amount of your Company's holdings will fall on structures ranging from salt-type structures, similar to those on the United States Gulf Coast, to large anticlines.

Panarctic presently has two drilling rigs working in the Arctic Islands, and a third is expected to be in operation shortly. Two wells drilled on Melville Island were dry and abandoned, the deeper of the two reaching a depth of 6,895 feet.

On Melville Island's Sabine Peninsula, the Panarctic Drake Point L-67 well, a projected 10,000-foot test, is blowing wild. A high pressure gas sand encountered at 3,600 feet was kept under control while the well was drilled to 8,454 feet, at which depth the well blew out of control.

Due to the condition of the hole, the rig was moved to drill a relief well, Panarctic Drake Point K-67A, some 1,200 feet east of the wild well, with the expectation of deepening this hole to 10,000 feet in an effort to determine which zones caused the problems in the first well.

Subsequent reports revealed that the Drake Point K-67A well had tested a sand encountered at 4,650 feet and the well flowed gas at the rate of 13,000,000 cubic feet per day, with oil and condensate also being recovered. The well lost some circulation while drilling in this sand, with an oil-stained core being recovered over the interval from 4,715 to 4,736 feet. A drillstem test of the interval 4,600 to 4,746 feet flowed gas at the rate of 13,000,000 cubic feet per day, with some oil, condensate, mud and filtrate water being recovered. The well is drilling ahead after setting casing at 5,000 feet. Previously, on a drillstem test from 3,674 to 3,760 feet the well flowed gas at the rate of 10,000,000 cubic feet daily.

On the west side of the Sabine Peninsula, Panarctic recently exercised an option to drill a 10,000-foot test on Homestead's Permit No. 1832 to earn a half interest in 30,420 acres, some 10 miles east of the Company's wholly-owned block of 751,000 acres. The difficulties experienced with the Drake Point drilling has deferred commencement of this test, since the Drake Point rig is to be used at this location.

Panarctic also has started to move in equipment for the drilling of another test in the eastern section of Melville Island. This well, Panarctic Towson Point G-63, is located about 35 miles south of the Company's wholly-owned offshore block of 798,000 acres. Equipment also has been moved into the Fosheim area of central Ellesmere Island in preparation for drilling early next year in the vicinity of Permit No. 831. The Company has interests in approximately 138,000 gross acres in this area.

A drilling license was recently issued for Panarctic's Hoodoo Dome F-27 well on the

# Company-interest properties included in Panarctic Agreements

Islands	Gross Acres	<u>%</u>	Net Acres	Panarctic Drilling Obligations(6)
TriCeeTee Agreement Prince Patrick, Brock, Melville, Emerald, Bathurst, Ellef Ringnes, Amund Ringnes, Cornwall, Axel Heilberg	3,687,097	331/3 %	1,229,032	Two 10,000-foot test wells
CSP-Clark-Skelly Eight Bears CSP-B.P. Melville	57,210 62,650	40% 87.5%	22,884 54,819	
CSP Axel Heiberg, Ellesmere	709,234	100%	709,234	At least two 6,000-foot test wells on or in the vicinity of Company lands on these islands
	4,516,191		2,015,969	

# Interest to be retained by the Company

	Mini	imum(1)	Maxi	mum(1)
	% W.I.	Net Acres	% W.I.	Net Acres
TriCeeTee Agreement(2)	6.667	245,819	26.667	983,238
CSP-Clark-Skelly(3)	8.000	4,577	29.333	16,781
CSP-B.P.(4)	17.500	10,964	64.167	40,201
CSP(5)	20.000	141,847	73,333	520,103
		403,207		1,560,323

- (1) Depending on Panarctic's actual expenditures in the entire Arctic Islands program, from a minimum of \$20,000,000 to a maximum of \$30,000,000, it can earn from a 20% to 80% working interest in the TriCeeTee properties and from a 26%% to an 80% working interest in the other properties.
- (2) Convertible to 5.0% up to 11.666% carried interest or 1.333% up to 2.5% overriding royalty.
- (3) Convertible to 6.0% up to 12.0% carried interest or 1.6% up to 2.8% overriding royalty.
- (4) Convertible to 13.125% up to 26.25% carried interest or 3.5% up to 6.125% overriding royalty.
- (5) Convertible to 15.0% up to 30.0% carried interest or 4.0% to 7.0% overriding royalty.
- (6) Based on maximum program.

southern portion of Ellef Ringnes Island, drilling of which is expected to commence shortly. This well is located on a surface structure covering 160,000 acres which is interpreted to be the result of a deep-seated Gulf Coast-type salt structure. This test is significant to Canada Southern in that your Company has an interest in approximately one-third of an almost identical structure on Amund Ringnes Island to the east.

In addition to its drilling program, Panarctic this year has carried out surface work and extensive geological surveys in the Arctic Islands. Panarctic's prospective drilling program will include two 10,000-foot tests on Canada Southern's TriCeeTee partnership lands, the first of which is to be commenced in 1970, and two tests on or in the vicinity of Canada Southern's 100%-owned lands which have been farmed out to Panarctic.

An interesting development associated with the Panarctic program was the use made of the new Axelbow plow on one of the barges used to ship drilling supplies to Melville Island. This new method of plowing the ice rather than breaking it from above showed promising results and further trials are now planned. Should these trials uphold the earlier promise of this unique equipment, the Axelbow could have a significant effect on water transportation in the Arctic region.

In addition, the successful voyage of the small cargo ship, Chesley A. Crosbie, with 1,900 tons of supplies to the Fosheim area of central Ellesmere Island this past summer illustrated the comparative difference in ice conditions between the eastern and western Arctic. Ice conditions in many of the offshore areas adjacent to the eastern Arctic Islands are now regarded as much less severe than those prevailing in the western areas which are closer to the polar ice pack in the Beaufort Sea. It was in this western area that the Manhattan encountered the most severe ice conditions on its historic voyage through the

Northwest Passage. It is believed that polar shipping with like equipment will find the Arctic Islands easier of access than the north slope of Alaska.

# British Columbia

Flatrock Area. This area, some 20 miles northeast of Fort St. John, attracted considerable attention during the past year. Five wells were drilled on Canada Southern interest lands, one of which, Champlin et al. Flatrock 10-9-84-16 (CSP, 21.25% carried interest), resulted in a shallow gas discovery. Pacific has also just completed its Siphon 7-34-86-16 on former Permit 100 (CSP, 21.25% carried interest) as a Triassic Baldonnel gas well.

Fort Nelson Area. The Devonian Slave Point gas fields of the Fort Nelson area represent an important part of Westcoast Transmission Company's reserves. In view of the contract recently signed by Westcoast with El Paso Natural Gas Company and of Westcoast's application for a further increase in throughput volume, the incentives to expanded exploratory activity in this region have been greatly increased. Westcoast has applied for licenses which would add over 5.07 trillion cubic feet of gas exports to its currently authorized amount of 3.7 trillion cubic Gas production on former Permit 103 (CSP, 21.25% carried interest) averaged 6,000,-000 cubic feet per day for the Company's account during the year ended June 30, 1969.

Peejay Area. The wells in the Weasel portion of the Peejay area are now unitized and a water-flood program was initiated for this unit in order to maintain production and increase recoverable reserves. Further drilling will probably be for the purpose of increasing the efficiency of the waterflood operations in the Peejay and Weasel Units. Oil production for the Company's ac-

# **ACREAGE SUMMARY — DECEMBER 1969**

	Gross Acreage		Net Acreage	
	in Which Interest is Held	Held Under Lease	Held Under Permit	Total
CANADA				
PETROLEUM				
British Columbia				
Pacific Agreement Working Interest Carried Interest Phillips Agreement — Carried Interest Other	298,596	35,858 63,049 76,378		
Working Interest		122,847 1,789	1,064	
Total British Columbia	967,686	299,921	1,064	300,985
Yukon & Northwest Territories				
Liard Basin  Dome-Pan Am Agreement — Carried Interest  Other		91,733 267,519	15,803	91,733 283,322
Total Yukon & N.W. Territories	564,302	359,252	15,803	375,055
Arctic Islands Panarctic Agreements (see accompanying table) TriCeeTee Other			1,229,032 786,937	,,
Total Panarctic Agreements			2,015,969 3,724,731	2,015,969 3,724,731
Total Arctic Islands	8,240,922		5,740,700	5,740,700
Total (Petroleum)	9,772,910	659,173	5,757,567	6,416,740
Saskatchewan & Alberta				
Mineral Permits	1,507,962		1,346,587	1,346,587
Total Canada	11,280,872	659,173	7,104,154	7,763,327
AUSTRALIA (Petroleum)	. 76,800	1.1 \	3,840	3,840
NEW ZEALAND (Petroleum)	5,183,360		1,295,840(*	1,295,840
Grand Total	16,541,032(**)	659,173	8,403,834	9,063,007(

<sup>(°)</sup> Reflects the undertaking by Magellan Petroleum Corporation to reimburse the Company for all costs relating to these permits through April 1, 1971 in return for the right to acquire a 75% interest therein.

<sup>(°°)</sup> The Company also has a right to acquire up to a 20% interest in any mineral prospects developed by Borealis Exploration Limited prior to April 1, 1972. Borealis holds mineral exploration rights covering approximately 1,996,000 gross (1,395,000 net) acres in the Northwest Territories of Canada.

count averaged 789 bbls. per day for the year ended June 30, 1969.

The National Energy Board has granted West-coast Transmission Company Ltd. permission to construct a 33-mile, 12<sup>3</sup>4-inch pipeline to service the Milligan, Peejay, Osborne, Lagarde and North Boundary gas fields. The completion of the pipeline will make possible the marketing of gas from fields in the Peejay area, where Canada Southern has a 27.25% carried interest in 52,705 gross lease acres.

# Yukon and Morthwest Territories

Celibeta Area. The Company carried out two modest seismic programs on its working interest lands in the Celibeta and Trout Lake areas located in the southwesterly corner of the Northwest Territories, and additional work is planned for the coming winter months. At present, one well is committed on Permit 2695 (CSP, 12.5% working interest) in the north Celibeta area. Considerable exploratory activity has been announced for this area by other companies.

Beaver River Area. Plans are now being formulated for further work on Company-interest lands in the Beaver River area. Meanwhile, Pan American Petroleum Corporation is pursuing an active drilling program on its 100%-owned properties, and is reported to have another potential gas well in the Beaver River field. This is the fifth well on the structure to find commercial quantities of gas. The discovery well, which was abandoned for mechanical reasons, is now being redrilled.

In the Pointed Mountain field, nine miles north of Canada Southern's 12,720-acre Lease 211-67 (CSP, 90% working interest), Pan American has completed three gas wells. A fourth hole, Pan Am Pointed Mountain 0-46, is pres-

ently drilling at a location some 12 miles north of the Company's Lease 211-67.

Completion of the Westcoast Transmission-El Paso new gas sales contract under which the latter is taking its full contract volume of 500 million cubic feet daily, is providing new impetus to the planned construction of the 110-mile pipeline extension from Fort Nelson to Beaver River, with attendant increased exploration and development in the Beaver River-Pointed Mountain area. The potential significance of this area, believed to represent possibly the largest natural gas reserve area in Canada, is attested by three recent proposals having been advanced for construction of major pipelines linking the Beaver River-Pointed Mountain district with United States markets.

As shown in the accompanying acreage summary many of the Company's property interests in British Columbia and in the Yukon and Northwest Territories are carried interests. Under the carried interest agreements in which it participates, the Company is not obligated to make expenditures on the properties but is entitled to share in production proceeds after expenditures on a block have been recouped out of such proceeds. The Company may convert to a working interest at any time by paying its pro rata share of unrecouped expenditures.

The table which follows shows the status of the blocks under the various carried interest agreements. Block G under the Phillips Agreement reached payout status in December 1968 and the Company had accrued \$192,910 as its share of net proceeds through June 30, 1969. The prospects for payout of other blocks is indicated by a comparison of the net expenditures column with the production proceeds column for the current year. The extreme right hand column shows the cost to the Company to convert to a working interest for any block.

#### Status of Carried Interest Agreements at June 30, 1969

		Acres		Cumulative to June 30, 1967		
Block	Permit No.	Gross	Company Net	Gross Expenditures	Production Proceeds	
Pacific	Agreement					
	Ex. Ps. 100-105	294,796	62,645	\$12,900,889	\$5,354,248	
Philips	Agreement					
A	Ex. Ps. 267, 268	37,747	10,475	1,437,097		
В	Ex. Ps. 262, 234, 266, 245-248	92,994	25,807	1,322,700		
C	Ex. P. 149	26,519	13,258	5,093,627	284,606	
E	Ex. P. 158	24,425	12,212	508,576		
F	Ex. P. 178	26,702	7,410	1,460,905	733,409	
G	Ex. P. 224	25,829	7,216	3,408,681	2,345,105	
		234,216	76,378			
Comme	Par ann					
A	Ex. Ps. 1007, 1132, 1133	73,038	32,868		•	
В	Ps. 1136, 2713, N½ of Ps. 1137 and 2301, Ex. P. 1153	123,604	55,622	149,928		
C	Ex. Ps. 1149, 1156, 1178, 1181, 1173, 1176	82,571	37,157	697,911		
		279,213	125,647			

Block G (Peejay) reached payout status in December 1968 and by June 30, 1969 the Company's share of profits amounted to \$192,910. (See Note 3 of accompanying notes to financial statements.)

## MINERAL EXPLORATION

# Wollaston Lake Uranium Project

The Company last year acquired interests in over 2,500,000 gross acres of mineral permits in the Wollaston Lake area of northern Saskatchewan, where, late in 1968, a subsidiary of Gulf Oil Corporation reported a significant uranium discovery. By mid-1969 mineral permits cover-

ing more than 20,000,000 acres had been issued by the Saskatchewan Department of Mineral Resources. As a result of the Gulf discovery, the area is being subjected to detailed exploration for the first time. Due to the sparse amount of outcropping rock in the area, geophysical and geochemical surveys are the principal survey methods in use.

By utilizing the results of its 1969 field work, the Company reduced its holdings in December 1969 to 1,507,000 gross acres (1,346,000 net

	ear ended e 30, 1968		Year ended June 30, 1969		Cumulative to June 30, 1969		Comp	oany Interest
Gross Expendi- tures	Production Proceeds	Gross Expendi- tures	Production Proceeds	Gross Expendi- tures	Production Proceeds	Net Expendi- tures	<u>%</u>	Cost to Convert to a Working Interest
\$732,656	\$ 894,231	\$525,684	\$ 915,206	\$14,159,229	\$7,163,685	\$6,995,544	21.25	\$1,486,553
28,391		37,838		1,503,326		1,503,326	27.75	417,173
540,961		86,413		1,950,074		1,950,074	27.75	541,146
46,307	(2,421)	63,079	(2,639)	5,203,013	279,546	4,923,467	50.00	2,461,733
24,425		24,425		557,426		557,426	50.00	278,713
92,468	432,642	389,626	380,587	1,942,999	1,546,638	396,361	27.75	115,871
631,475	1,321,034	240,413	1,333,276	4,280,569	4,999,415	(718,846)*	27.75	۰
6,557		28,852		35,409		35,409	45.0	15,934
ŕ						Ť		ŕ
145,792		9,222		304,942		304,942	45.0	137,224
281,467		26,215		1,005,593		1,005,593	45.0	452,517

acres), retaining the more prospective portions of the properties. The Company currently is discussing with Magellan Petroleum Corporation an arrangement to pool their acreage and consolidate their mineral activity in this area.

# Burealis Exploration Limited

In 1968 the Company and United Canso Oil & Gas Ltd. entered into agreements with Catawba International, Inc. and Borealis Exploration Ltd.

which entitle them to participate in mineral prospects developed by the latter company prior to April 1972. Borealis is engaged in mineral exploration in the Canadian Arctic and presently holds interests in some 2,000,000 acres located in three main areas of the Northwest Territories: Melville Peninsula, the Hood River area, and Baffin Island.

Of particular interest was the discovery by Borealis last year of large iron deposits on its permit areas in the eastern and western sectors of Melville Peninsula. In the eastern sector an iron-bearing formation was traced over a length of 30 miles within which four zones, each 400 feet in width and over 4,000 feet long, were outlined. In the western sector, an iron-bearing zone averaging 600 feet in width over a length of 10,500 feet was mapped. Samples from a representative cross-section of this zone showed an average soluble iron content of 40%. In metallurgical tests, samples from both deposits produced concentrates which exceed industry specifications and which have excellent qualities for pelletizing. Possible ore reserves in both deposits are estimated to exceed 1,500,000,000 tons. The 1969 exploratory program has included detailed studies of the Melville Peninsula iron deposits, including geological mapping, geophysical surveys and bulk sampling.

In the Hood River area, located approximately 300 miles northeast of Yellowknife, Borealis holds prospecting permits covering some 300,000 acres located in a geological environment which in that region has proved favorable for base metal ore deposition. Reconnaissance mapping and sampling carried out in the summer of 1968 returned significant values of copper, zinc, gold and silver at a number of localities on the properties. The exploratory program in 1969 included an airborne geophysical survey, the results of which are presently being evaluated. Detailed field work will be carried out in the 1970 season.

In addition, Borealis during recent months has been engaged in an intensive uranium search program in a joint venture with Reactor Uranium Mines Limited covering over 1,300,000 acres of mineral permits on Baffin Island. Airborne radiometric surveys and field work suggest possible presence of uranium-bearing deposits on which further work is scheduled for the coming year.

Canada Southern's participation in the Borealis venture is represented by the ownership of 90,000 shares of stock in the latter company, and

of \$255,000 face-amount of Borealis' debentures. The Company also holds certain options including the option to acquire, at cost, up to a 20% direct interest in any mineral prospects developed by Borealis prior to April 1, 1972 or until work to prove a prospect is commenced, whichever first occurs.

# New Zealand

The Company further broadened the geographic diversification of its oil-search operations this year through the acquisition, effected by its wholly-owned subsidiary, Canada Southern Petroleum (N.Z.) Limited, of a 25% interest in 5,183,360 acres of petroleum permits offshore New Zealand's North and South Islands.

The Canada Southern concession areas, shown on the accompanying map, consist of North Cape (1,090,560 acres), Hauraki (1,974,400 acres), Bay of Plenty (774,400 acres), all bordering the northeast coast of North Island, and Westland (1,344,000 acres), lying off the west central coast of South Island.

Canada Southern's partner in the New Zealand venture, Magellan Petroleum New Zealand Limited, recently completed an extensive 5,000-mile reconnaissance survey of offshore New Zealand waters including the Company-interest concession areas. Additional seismic work will be conducted on these offshore properties during the coming year.

The petroleum search offshore New Zealand has attracted mounting interest as a result of the discovery of oil last March by the Shell-British Petroleum-Todd Services consortium at its Maui No. 1 well, some 33 miles off the west coast of North Island. More recently, the consortium confirmed the presence of hydrocarbons in its Maui No. 2 well, a nine-mile stepout to the east, indicating this to be a discovery of major proportions. This is the first of several widely-spaced confirmatory tests which the consortium plans to drill in the area in the future.



# CANADA SOUTHERN PETROLEUM LTD. (A Canadian corporation)

# CONSOLIDATED BALANCE SHEET

(Expressed in Canadian dollars)

June 30, 1969 and 1968

# ASSETS AND DEFERRED EXPENDITURES

	1969	1968
Current assets:		
Cash	\$ 923,205	\$ 55,641
Bank deposit receipts	4,350,000	475,000
Accounts receivable:		
Refundable deposits	436,237	_
Pacific Petroleums Ltd.	61,331	_
Due from sales of the Company's capital stock	26,561	
Other	45,834	14,534
Special refundable tax — Government of Canada	134,475	_
Refundable deposits and prepaid expenses	42,111	21,581
Total current assets	6,019,754	566,756
Special refundable tax — Government of Canada	_	134,475
Investments and advances:		•
United Canso Oil & Cas Ltd., 84,099 shares of capital stock and warrants to purchase 7,008 shares of capital stock, at cost (market value \$373,751)	_	155,091
Borealis Exploration Limited, at cost:		
8% unsecured debentures, maturing March 31, 1978—interest accruing thereon after March 31, 1973	225,000	
5.36% of common stock	84,000	_
Trans-Border Holdings Limited, 50% of capital stock, at cost, and advances	,	
of \$5,248	117,248	117,248
Other	5,975	13,975
Oil and gas permits, leases and interests, including well, geological and geophysical,	5,935,169	5,878,633
lease rental and dry hole costs	5,038,357	4,896,766
Other exploratory expenses and general and administrative expenses deferred Land, building and equipment, at cost less accumulated depreciation of \$229,020	0,000,001	4,090,700
and \$217,746, respectively	128,172	139,286
	\$17,553,675	\$11,902,230

The accompanying notes are an integral part of this statement.

# LIABILITIES AND CAPITAL

		1969		1968
Current liabilities:				
Non-interest bearing note payable to Borealis Exploration Limited	\$	75,000	\$	
Accounts payable and accrued liabilities:				
The Catawba Corporation		28,307		17,945
Other		92,571		97,009
Current portion of mortgage loan		18,200		17,000
Total current liabilities		214,078	-	131,954
Deferred income		77,025		_
7% mortgage loan, maturing February 1974 (secured by land and building), less portion included above		78,409		95,208
Capital:				
Capital stock, par value \$1 per share:				
Authorized — 10,000,000 shares				
Outstanding — 8,565,350 and 6,997,306 shares, respectively	8	3,565,350		6,997,306
Capital in excess of par value	14	1,069,240	1	0,030,381
	22	,634,590	1	7,027,687
Deductions from capital	5	5,450,427		5,352,619
	17	,184,163	1	1,675,068
Commitments and contingent liabilities (Note 3)				
	\$17	,553,675	\$1	1,902,230

On behalf of the Board:

s/s John W. Buckley, *Director* s/s M. A. Reasoner, *Director* 

# CANADA SOUTHERN PETROLEUM LTD. (A Canadian corporation)

Year ended June 30, 1968 and 1969

(Expressed in Canadian dollars)

CONSOLIDATED STATEMENT OF OIL AND	Balance June 30, 1967	Additions and transfers
GAS PERMITS, LEASES AND INTERESTS		
Oil and gas permits, leases and interests (including excess of cost of investment in certain subsidiaries over net assets acquired)  Cost of standing wells  Geological and geophysical expenses  Lease rentals  Dry hole costs	\$3,063,737 1,544,338 656,325 483,504 181,799 \$5,929,703	\$ 10,566 15,470 88,529 77,537 (6,433) \$185,669
CONSOLIDATED STATEMENT OF OTHER EXPLORATORY EXPENSES AND GENERAL AND ADMINISTRATIVE EXPENSES DEFERRED	ES	
Portion of organization, corporate, general and administrative expenses incurred by predecessor company prior to April 20, 1954	\$1,956,162	
Salaries and employee benefits Financial, technical and other services under contract Legal services Stockholders' reports and capital stock expenses Building maintenance and rent Depreciation, depletion and amortization Interest and exchange Intangible drilling costs, lease operating costs and royalties Auditing services Travel Miscellaneous	1,814,003 1,651,087 812,040 664,903 505,604 310,373 324,518 319,349 109,628 129,931 697,077	\$132,209 113,037 34,601 83,792 47,833 17,025 8,180 7,108 15,039 2,938 35,210
	9,294,675	496,972
Less income received: Rent, interest and other income Oil and gas sales Technical and administrative services rendered Payments received from Phillips Petroleum Company on assigned properties less refund	740,559 677,509 180,183 37,425	65,975 11,056 213
	1,635,676	77,244
Total before abandonments, sales and carried interest proceeds	7,658,999	419,728
Less: Portion of above expenses considered allocable to interests abandoned or sold Proceeds received or receivable under carried interest agreement	3,155,029	
	\$4,503,970	\$419,728
The accompanying notes are an integral part of these statements.		

Abandonments and sales	Balance June 30, 1968	Additions and transfers	Abandonmentsand sales	under carried interest agreement	Balance June 30, 1969
\$160,577 2,886 43,665 29,594 17 \$236,739	\$2,913,726 1,556,922 701,189 531,447 175,349 \$5,878,633	\$ 11,156 21 195,094 194,213 23,200 \$423,684	\$156,575 	\$ 21,164 25,008 10,496 — \$ 56,668	\$ 2,747,143 1,556,943 813,298 620,239 197,546 \$ 5,935,169
	\$1,956,162				\$ 1,956,162
	1,946,212 1,764,124 846,641 748,695 553,437 327,398 332,698 326,457 124,667 132,869 732,287	\$140,267 179,529 58,407 130,897 47,558 17,955 7,533 7,779 11,302 2,937 63,566			2,086,479 1,943,653 905,048 879,592 600,995 345,353 340,231 334,236 135,969 135,806 795,853
	806,534 688,565 180,396	182,336 11,030 124			988,870 699,595 180,520
	37,425	193,490			37,425 1,906,410
	1,712,920 8,078,727	474,240			8,552,967
\$ 26,932 26,932 \$ 26,932	3,181,961 	\$474,240	\$196,407 196,407 \$196,407	\$136,242 136,242 \$136,242	3,378,368 136,242 3,514,610 \$ 5,038,357

Proceeds

# CONSOLIDATED STATEMENT OF SOURCE AND DISPOSITION OF WORKING CAPITAL

(Expressed in Canadian dollars)
Year ended June 30, 1969 and 1968

	1969	1968
Source of working capital:		
Sales of capital stock (net)	\$5,470,529	\$ 976,141
Exercise of stock options	129,565	_
Exercise of stock purchase warrants	6,809	_
Proceeds from sales of capital stock and warrants of United Canso Oil & Gas Ltd.	560,831	
Proceeds under carried interest agreement	192,910	
Special refundable tax (non-current)	134,475	(9,460)
Increase in deferred income	77,025	_
Depreciation of building and equipment	14,809	14,783
Proceeds from sales of equipment	3,489	2,886
	6,590,442	984,350
Disposition of working capital:		•
Additions to other exploratory expenses and general and administrative expenses deferred (net)	474,240	419,728
Additions to oil and gas permits, leases and interests	423,684	185,669
Investments in Borealis Exploration Limited and others	301,000	(16,105)
Decrease in 7% mortgage loan	16,799	17,032
Additions to building and equipment	3,845	12,543
	1,219,568	618,867
Increase in working capital	5,370,874	365,483
Working capital at beginning of year	434,802	69,319
Working capital at end of year	\$5,805,676	\$ 434,802

The accompanying notes are an integral part of this statement.

# CONSOLIDATED STATEMENT OF CAPITAL STOCK AND CAPITAL IN EXCESS OF PAR VALUE

(Expressed in Canadian dollars)

Year ended June 30, 1968 and 1969

		Number of shares	Capital stock, \$1 par value	Capital in excess of par value	Total
Bala	ance at June 30, 1967	6,599,706	\$6,599,706	\$ 9,451,840	\$16,051,546
	Net proceeds from sales of capital stock	397,600	397,600	578,541	976,141
Bala	ance at June 30, 1968	6,997,306	6,997,306	10,030,381	17,027,687
	Net proceeds from sales of capital stock	1,532,068	1,532,068	3,938,461	5,470,529
	Exercise of stock options	34,374	34,374	95,191	129,565
	Exercise of stock purchase warrants	1,602	1,602	5,207	6,809
	ance at June 30, 1969 before deductions from apital	8,565,350	\$8,565,350	\$14,069,240	\$22,634,590

#### CANADA SOUTHERN PETROLEUM LTD.

#### NOTES TO FINANCIAL STATEMENTS

June 30, 1969

#### 1. Basis of the financial statements

The accompanying consolidated financial statements include the accounts of Canada Southern Petroleum Ltd. (Canada Southern) and its wholly-owned subsidiaries, Act Oils Limited (Act Oils) and Rampart Petroleums Ltd., hereafter referred to collectively as the Company.

The properties in which the Company has interests are in an exploratory or development stage and, accordingly, all expenditures (less income) have been capitalized or deferred, except that costs and expenses applicable or considered allocable to areas abandoned and other losses, net of profits on sales of certain interests and the excess of Canada Southern's equity in net assets of Act Oils over its investment at acquisition, have been deducted from capital.

Realization of the amounts represented by investments and advances, oil and gas permits, leases and interests and other exploratory expenses and general and administrative expenses deferred is dependent upon future developments, since the properties represented by these assets and deferred expenditures are substantially unexplored or undeveloped.

#### NOTES TO FINANCIAL STATEMENTS — continued

June 30, 1969

Deductions from capital for the year ended June 30, 1969 and 1968 are summarized as follows:

Losses on abandonments or sales of interests:	<u>1969</u>		1968
Prior years (including losses on former operations in the United States)	\$10,809,749 503,548		\$10,548,964 260,785
	11,313,297		10,809,749
Profits on sales of certain interests:			
Prior years	4,547,739	Α.	4,547,739
Year ended June 30	405,740		
Excess of Canada Southern's equity in net assets of Act Oils over its investment at acquisition	909,391		909,391
	5,862,870		5,457,130
Deductions from capital	\$ 5,450,427		\$ 5,352,619

## 2. Investments and advances

During the year ended June 30, 1969, the Company sold its investment in United Canso Oil & Gas Ltd. (United Canso) for \$560,831, realizing a profit of \$405,740 which has been credited to deductions from capital in the accompanying consolidated financial statements.

In May 1968, the Company and United Canso entered into an agreement, subsequently amended, with Catawba International, Inc., a subsidiary of The Catawba Corporation, which was acting on behalf of a new company, Borealis Exploration Limited (Borealis), then being organized for the purpose of engaging in mineral exploration in northern Canada. The Company agreed to advance \$225,000 in cash over a three-year period to Borealis, of which \$75,000 is payable on March 31, 1970, in exchange for \$225,000 face amount of Borealis 8% debentures, maturing March 31, 1978, together with certain options including the option to acquire, at cost, a 20% direct interest in any mineral prospects developed by Borealis prior to March 31, 1972 or until work to prove a prospect is commenced, whichever first occurs. Borealis, in consideration of the Company's agreeing to forego interest for the period ending March 31, 1973 and agreeing to join with United Canso in maintaining Borealis' books and records at the Company's and United Canso's expense for the period ending March 31, 1972, issued to the Company 90,000 fully-paid and non-assessable shares of its common stock. These shares were valued at \$84,000, based on the above-mentioned considerations, which amount has been treated as deferred income in the accompanying consolidated financial statements, of which amount \$6,975 was taken into income during the year ended June 30, 1969.

#### 3. Properties and related exploratory and other expenses

The Company's properties and property interests are located in British Columbia, the Yukon and Northwest Territories, the Arctic Islands, Saskatchewan, Alberta, Australia and New Zealand.

At June 30, 1969, much of the acreage located in British Columbia and the Yukon and Northwest Territories was covered by carried (net profits) interest agreements. These carried interest agreements provide that profits are not payable to the Company until expenditures by the operators have been recouped from production. Also, the Company may at any time elect to convert its position from a carried interest to a working interest by paying its share of the expenditures not recouped by profits from production. At June 30, 1969, the accumulated expenditures by the operators attributable to the Company's carried interests substantially exceeded the amounts recouped from production, except for one block which reached payout status during December 1968. The Company's share of profits from this block was \$192,910 during the period ended June 30, 1969, which amount has been credited to oil and gas permits,

# NOTES TO FINANCIAL STATEMENTS — continued

June 30, 1969

leases and interests and other exploratory expenses and general and administrative expenses deferred in the accompanying consolidated financial statements.

At June 30, 1969, the Company's share of the cost of a standing well, completed as a discovery on a permit in the Yukon during the year ended June 30, 1965 at which time the Company had a 45% working interest, amounted to \$1,130,168. It is anticipated that a significant amount of rework will be necessary to bring this well to production.

A significant portion of the Company's interests in the Arctic Islands is subject to an agreement with Panarctic Oils Ltd., whereby the latter company may earn interests ranging from 20% to 80% by carrying out a specified exploratory program.

In Saskatchewan and Albert, the Company holds mineral exploration permits in the Athabasca sandstone basin where exploratory activities are in progress.

Subsequent to June 30, 1969, through a newly-organized, wholly-owned subsidiary, Canada Southern Petroleum (N.Z.) Limited, the Company acquired four New Zealand offshore concessions covering approximately 5,183,000 acres. Under a letter agreement, Magellan Petroleum Corporation undertook to reimburse the Company for all costs relating to these concessions through April 1, 1971 in return for the right to acquire a 75% interest in the concessions.

No provision for amortization of the amount carried for oil and gas permits, leases and interests or for other exploratory expenses and general and administrative expenses deferred is included in the accompanying consolidated financial statements. Depreciation has been provided for building and equipment by the straight-line method based on estimated useful lives. Depreciation of well equipment and amortization of intangible drilling costs pertaining to producing wells is computed by the unit-of-production method.

Lease rentals, work requirements and deposits in connection with the properties and property interests held by the Company at June 30, 1969 approximate \$1,555,000 for the year ending June 30, 1970.

During June 1969, Canada Southern issued notes aggregating \$436,237 to the governments of Canada and Saskatchewan because of uncompleted work requirements on various permits. These notes have been excluded from the accompanying consolidated financial statements, since they will be cancelled by the governments upon the completion of these work requirements. These notes replaced the \$436,237 receivable from refundable deposits outstanding at June 30, 1969, which amount was received by the Company during July and August 1969.

#### 4. The Catawba Corporation

The amounts shown in the consolidated statement of other exploratory expenses and general and administrative expenses deferred for financial, technical and other services under contract represent charges from The Catawba Corporation (Catawba). Canada Southern's current (expiring July 1973) and prior contracts with Catawba have provided for payments based on services rendered and the granting of a 1/64th overriding royalty on all properties acquired by Canada Southern during the term of the contract. The contracts also have provided for special compensation for services rendered not contemplated under the contracts. During the year ended June 30, 1969, the Company approved a \$35,000 payment to Catawba as a bonus for services rendered in connection with the 1968 "Subscription Offier" of the Company. Catawba provides similar services to United Canso Oil & Gas Ltd. and Magellan Petroleum Corporation. Certain of the stockholders, officers and employees of Catawba are directors, officers and/or shareholders of Canada Southern and of the other companies mentioned above.

#### 5. Capital, stock purchase warrants, and stock options and reservations

During the year ended June 30, 1969, the Company sold 1,259,050 shares of its capital stock together with stock purchase warrants, pursuant to a "Subscription Offer" dated October 28, 1968 made by the Company to its share-holders, realizing net proceeds of \$3,370,728. These warrants entitle the holder to purchase shares of the Company's capital stock at a price of \$4.25 for each share purchased on or before December 31, 1970, \$5.00 from January 1, 1971 to December 31, 1972 and \$5.75 from January 1, 1973 to December 31, 1973. During the year ended June 30,

#### NOTES TO FINANCIAL STATEMENTS - continued

June 30, 1969

1969, warrants to purchase 1,602 shares were exercised with proceeds to the Company of \$6,809. At June 30, 1969, there were stock purchase warrants outstanding for the purchase of 627,923 shares of the Company's capital stock. Also, during the year ended June 30, 1969, the Company sold 273,018 shares of its capital stock without stock purchase warrants, realizing net proceeds of \$2,099,801 of which \$26,561 receivable at June 30, 1969 was received by the Company on July 17, 1969.

On April 11, 1967, the Company's shareholders approved an incentive stock option plan authorizing the Board of Directors to grant options on 300,000 shares of the Company's capital stock. Under this plan, on January 8, 1968, options to purchase shares were granted to The Catawba Corporation for 150,000 shares and to employees for 58,000 shares and, on June 25, 1969, options were granted to a Canadian counsel for 10,000 shares. The options granted to Catawba vest and become exercisable to the extent of 35% beginning January 8, 1969, an additional 35% beginning January 8, 1970 and the remaining 30% beginning January 8, 1971. The options granted to employees and the Canadian counsel had the same provisions as to vesting and to exercise, but due to certain considerations the Board of Directors in 1969 amended the employees and Canadian counsel options so that these options vested and became exercisable immediately following such Board action.

During the year ended June 30, 1969, employees and Catawba exercised options on 34,374 shares at \$3.50 (U.S.) per share, an aggregate \$120,309, as compared with market prices ranging from \$6.00 to \$10.25 (U.S.) per share, an aggregate of \$280,450, on the dates of exercise.

Market

Stock options outstanding at June 30, 1969 are summarized as follows:

Optionee	Date of grant	Expiration date	Number of shares	Option price (per share)	price (per share) at date of grant
The Catawba Corporation	Jan. 8, 1968	Jan. 7, 1973	146,326	\$3.50(U.S.)	\$3.50(U.S.)
Employees	Jan. 8, 1968	Jan. 7, 1973	27,300	3.50	3.50
Canadian counsel	June 25, 1969	June 24, 1974	10,000	8.00	8.00
			183,626		

At June 30, 1969, 64,426 of the above-mentioned options on 218,000 shares were exercisable. In addition, there were 105,000 shares reserved for future option grants at June 30, 1969. During the year ended June 30, 1969, there were no changes in stock options other than as mentioned above.

#### 6. Allocated expenses and compensation

Certain employees and office facilities are shared with United Canso Oil & Gas Ltd. and certain of the general and administrative expenses represent allocated portions of common expenses. Compensation of directors, officers and senior employees and contributions to a pension plan on their behalf allocated to or paid directly by Canada Southern amounted to \$82,839 and \$4,537, respectively, for the year ended June 30, 1969.

The Board of Directors and Shareholders
CANADA SOUTHERN PETROLEUM LTD.

We have examined the accompanying consolidated balance sheet of Canada Southern Petroleum Ltd. at June 30, 1969, the related consolidated statements of oil and gas permits, leases and interests, of other exploratory expenses and general and administrative expenses deferred and of capital stock and capital in excess of par value and the consolidated statement of source and disposition of working capital for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, subject to such adjustment as would result from failure to recover in the future the amounts at which investments and advances, oil and gas permits, leases and interests and other exploratory expenses and general and administrative expenses deferred are carried in the consolidated balance sheet (see Note 1), the statements mentioned above present fairly the consolidated financial position of Canada Southern Petroleum Ltd. at June 30, 1969, the consolidated changes in oil and gas permits, leases and interests, in other exploratory expenses and general and administrative expenses deferred and in capital stock and capital in excess of par value and the source and disposition of their consolidated working capital for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ARTHUR YOUNG, CLARKSON, GORDON & Co.

New York, N. Y. September 10, 1969





